

SOLAR PROMINENCE ACTIVITY.

[Reprinted from *Nature*, London, Jan. 6, 1923, p. 27.]

Every half year the Kodaikanal Observatory, India, issues a bulletin giving a summary of prominence observations during that period. The data for the first half of the present year [1922], in Bulletin No. LXX, have just been received. The mean daily areas and daily numbers of the prominences are few, as was to be expected from the cyclical nature of the phenomena, the respective figures being 3.17 (square minutes) and 11.05. Their distribution in latitude shows maxima in the belt 45°–50° in both hemispheres, and is very similar to that for the previous half year; this indicates that a new cycle of activity has begun in the higher zones of prominences. The statistics give further the distribution of prominences east and west of the sun's axis, the activity of the metallic prominences, particulars of the displacements of lines observed in the spectra of the chromosphere and prominences, reversals and displacements of H_a and D₂, and finally, areas and numbers of prominences projected on the disc as absorption markings. These valuable data are of great importance because they provide a complete record of the activity of the sun from a prominence point of view on a homogeneous system.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

C. FITZHUGH TALMAN, Meteorologist in Charge of Library.

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

Béron, Pierre.

Météorologie simplifiée par l'application de la loi physique au mode de la production: 1° de la chaleur terrestre par celle du soleil; 2° des courants maritimes; 3° des saisons avec les climats; 4° des vents avec les pluies; et 5° de l'électricité avec l'état magnétique; ouvrage indispensable aux marins. Paris. 1863. p. 723–944. illus. 22½ cm. [Extr.: L'Electrologie, nov.–déc.]

Beveridge, William H.

Wheat prices and rainfall in western Europe. [London.] 1922. p. 412–478. plates (fold.) 21½ cm. (Repr.: Journal Royal statistical society. v. 85, pt. 3. May, 1922.)

Bianconi, Gian Antonio.

Sul clima d'Europa all'epoca glaciale. Bologna. 1872. 28 p. 29½ cm.

Bigelow, Frank Hagar.

Treatise on the sun's radiation. Supplement no. 4. Atmospheric radiation, electricity, and magnetism. Vienna. 1922. viii, 89 p. illus. 23 cm.

Braak, C.

On cloud-formation. Nuclei of condensation, haziness, dimensions of cloud-particles. Batavia. 1922. 33 p. 27 cm. (K. Mag. en met. observ. Batavia. Verh. No. 10.)

Castrillón, Álvarez.

Recorrència mitjana de l'estat higromètric a l'observatori Fabra. Barcelona. 1922. 8 p. illus. plate. 22 cm. (Servei meteorològic de Catalunya. Notes d'estudi. N.º 10.)

Colombia. Observatorio meteorológico nacional del colegio de San Bartolomé.

Discursos leídos en su inauguración el dia 24 de Septiembre de 1922. Bogotá. 1922. 18 p. plates. 24 cm.

BACK NUMBERS OF THE REVIEW WANTED.

In order to complete file sets and volumes for binding, the following issues of the MONTHLY WEATHER REVIEW and SUPPLEMENTS are earnestly desired. If any recipients of the REVIEW do not care to retain their copies, they will confer a favor by notifying the Chief of Bureau, Weather Bureau, Washington, D. C., who will be glad to forward necessary franks for the mailing of the issues listed below:

1914.

February, March, April, October, and December.

1915.

All months *excepting* January, October, and November.

1916.

January, February, June, August, September, and October.

1918.

February, August.

1919.

August.

1921.

March, June, July, August, October, and November.

1922.

March, April.

SUPPLEMENT Nos. 1, 2, and 3.

BIBLIOGRAPHY.

Defant, Albert.

Ausstrahlung, nächtliche Abhöhlung und Bewölkung. p. 99–108. 25 cm. (Extr.: Geografiska annaler. H. 1. 1922.)

Die Bestimmung der Turbulenzgrößen der atmosphärischen Zirkulation aussertropischer Breiten. Wien. 1921. p. 383–403. figs. 24½ cm. Extr.: Sitzungsber. Akad. der Wissensch. Mathem.-naturw. Klasse, Abt. IIa, Bd. 130, H. 7–8, 1921.)

Die Zirkulation der Atmosphäre in den gemässigten Breiten der Erde. p. 209–266. figs. 25 cm. (Extr.: Geografika annaler. H. 3. 1921.)

Dujardin.

La chaleur et l'humidité à la surface de la terre. Paris. 1867. 96 p. illus. 15 cm.

Eichhorn, A.

Die klimatischen Verhältnisse von Lüneburg. Nach den Beobachtungen der hiesigen meteorologischen Station. Lüneburg. 1922. 39 p. illus. 22½ cm.

Errulat, F.

Die Fernwirkungen der Explosion von Rothenstein bei Königsberg i Pr. am 10. April 1920 mit besonderer Berücksichtigung der Bodenerschütterungen. 59 p. illus. plates. 25½ cm. (Mitt. Geol.-paläontol. Inst. und der Bernsteinsamml. der Univ. Königsberg i Pr. N. F. Nr. 25.) (Schriften d. Physik.-ökonom. Gesellschaft. Jahrg. 63, 1922.)

Febrer, Joaquim.

Pluges a Catalunya durant l'any meteorològic de 1920–1921. Barcelona. 1922. 8 p. illus. 22 cm. (Servei meteorològic de Catalunya. Notes d'estudi. N.º 9.)

Pluges a Catalunya durant la primavera de 1922. Barcelona. 1922. 8 p. illus. 23 cm. (Servei meteorològic de Catalunya. Notes d'estudi. N.º 11.)

Fischer, Hanns.

Die Wunder des Welteises. Eine gemeinverständliche Einführung in die Welteislehre Hanns Hörbigers. Berlin-Wilmersdorf. 1922. 104 p. illus. 19½ cm.

Frantzen, L. P.

Utilisations scientifiques et militaires des planeurs captifs cerfs-volants. pt. 1-2. 26, 14 p. illus. 24 cm. (Bulletin mensuel de l'assoc. des anciens élèves de l'école centrale lyonnaise. 19e année. Août-sept. 1922.)

Graeber, N.

Sonnenschein und Regen und ihre Einflüsse auf die ganze Schöpfung. Eine populäre Witterungskunde für Nichtmeteorologen. Weimar. 1870. x, 242 p. figs. map. 21 cm.

Hansen, H.

Meteorological observations on the Alabama expedition. København. 1922. p. 217-295. figs. 27½ cm. (Alabama-Ekspedition til Nordøst-Grønland, 1909-1912.) (Meddelelser om Grønland. 52.)

Hayford, John F.

Effects of winds and of barometric pressures on the Great Lakes. Washington. 1922. v. 133 p. plates. 25½ cm. (Carnegie inst. of Washington. Publication no. 317.)

Hernandez, Maurici.

Les temperatures màximes i mínimes a Mahó. Barcelona. 1922. 8 p. 22 cm. (Servei meteorològic de Catalunya. Notes d'estudi. N.º 13.)

Ihne, E.

Phænologische Mitteilungen, Jahrgang 1921. Darmstadt. 1922. 34 p. 23½ cm. (Arbeiten der Landwirtschaftskammer für Hessen. H. Nr. 31.)

International library of technology.

. . . Nautical astronomy, latitude, longitude and azimuth, Sumner's method, Marcq St. Hilaire's method, ocean meteorology, international rules and signals. Scranton. 1922. v. p. illus. 23 cm.

Italy. Servizio idrografico.

Determinazione preliminare della superficie dei bacini imbriferi con elenco delle stazioni idrografiche in funzione al 31 Dicembre 1919. [Roma.] n. d. 23 p. 23x34 cm.

Jensen, Christian.

Die Atmosphäre der Erde . . . Wolken und Wetter. Hamburg. 1922. 24 p. illus. plates. 14 cm.

Jones, Wellington D., & Whittlesey, D. S.

Types of climate . . . Chicago. 1922. 17 p. map. 23 cm. (Reprint Principles of economic geography.)

Maffei, Ranieri.

Dell' influenza dell' aria su i temperamenti, malattie, ed inclinazioni degli uomini. Livorno. 1765. 126 p. 21 cm.

Malde, O. G.

Local forecasting of his own cranberry bog very important for the Wisconsin cranberry grower. p. 25-29. 23 cm. (Extr. Wisconsin state cranberry growers' assoc. 35th annual meeting, Jan. 10, 1922.)

Mann, Robert James & others.

Die moderne Meteorologie. Sechs Vorlesungen, gehalten auf Veranlassung der meteorologischen Gesellschaft zu London. Deutsche orig.-Auszgabe. Braunschweig. 1882. x, 217 p. plates. 21½ cm.

Marvin, Charles F.

Reform of the calendar. [Washington. 1922.] 3 p. 24½ cm. [Repr.: Weather bureau topics and personnel.]

United States weather bureau: report prepared for the commission of the United States of America to the Brazil centennial exposition 1922-1923. Washington. 1922. 8 p. 23½ cm. [Editions also in Spanish and Portuguese.]

Moidrey, Joseph de.

Manuel élémentaire de météorologie. Zi-ka-wei. 1914. unp. 23 cm. [Text in Chinese.]

Montagne.

La houle sur les côtes du Maroc. Observations et méthode de prédition. pt. 1-2. n. p. [1922.] tables. plates. 31 cm. [Manifolded.]

Moore, Willis Luther.

New air world; the science of meteorology simplified. Boston. 1922. xii, 326 p. illus. plates. charts. 21 cm.

Moreau de Jonnès, A.

Tableau du climat des Antilles, et des phénomènes de son influence sur les plantes, les animaux et l'espèce humaine. Paris. 1817. 84 p. 21 cm.

Newbiggin, Marion I.

Frequented ways: a general survey of the land forms, climates, and vegetation of western Europe, considered in their relation to the life of man; including a detailed study of some typical regions. London. 1922. xi, 231 p. illus. plates. 23 cm.

Novakovsky, Stanislaus.

Climatic provinces of the Russian Far East in relation to human activities. New York. [1922.] p. 100-115. illus. 25½ cm. (Repr.: Geographical review. v. 12, Jan., 1922.)

Effect of climate on the efficiency of the people of the Russian Far East. p. 275-283. 27 cm. (Extr.: Ecology. v. 3, Oct., 1922.)

Quixal, Antoni.

Sondatges de l'atmosfera lliure a Barcelona amb globus pilots, des del 19 de Setembre de 1921 al 30 de Setembre de 1922. Barcelona. 1922. 24 p. 22 cm. (Servei meteorològic de Catalunya. Notes d'estudi. N.º 12.)

U. S. Bureau of efficiency.

Report on the statistical work of the United States government submitted to congress in pursuance to the acts of March 1, 1919, and November 4, 1919. Washington. 1922. xv, 405 p. plates (fold.) 23½ cm. [Weather bureau, p. 174-181.]

Visser, S. W.

Inland and submarine epicentra of Sumatra and Java earthquakes. Batavia. 1922. 14 p. plates. 27½ cm. (K. Mag. en met. obs. te Batavia. Verhandl. no. 9.)

Zealley, P. Raymond.

Introduction to forecasting weather. Cambridge. 1922. 32 p. illus. front. 19 cm.

RECENT PAPERS BEARING ON METEOROLOGY AND SEISMOLOGY.

C. F. TALMAN, Meteorologist in Charge of Library.

The following titles have been selected from the contents of the periodicals and serials recently received in the Library of the Weather Bureau. The titles selected are of papers and other communications bearing on meteorology and cognate branches of science. This is not a complete index of all the journals from which it has been compiled. It shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau.

American meteorological society. Bulletin. Worcester, Mass. v. 3. 1922.

Visher, Stephen Sargent. Local climates in the tropics. p. 119-121. (Sept.)

Alter, J. Cecil. Weather exhibit. p. 158-159. (Nov.)

Brooks, Charles F. The coming winter in the northeastern United States. p. 151-152. (Nov.)

Brooks, Charles F. Wet bulb temperatures below 32° F. p. 159-160. (Nov.)

Campbell, E. S. A preliminary plan for teaching pupils of junior high school age some facts about the atmosphere and weather. p. 153-156. (Nov.)

Garrett, C. C. Temperature and the codling moth. p. 153. (Nov.)

Annalen der Hydrographie und maritimen Meteorologie. Berlin. 50. Jahrg. 1922.

Kuhlbrodt, Erich. Das Windsystem im Fuss der Sachsenwaldtrombe von 28. Juni 1920. p. 151-158. (Mai.)

Thorade, H. Die ablenkende Kraft der Erdumdrehung. p. 150-154. (Mai.)

Bongards, Hermann. Der tägliche Gang des Luftdrucks. p. 169-182. (Juni.)

Casten, Gerhard. Neuere englische Bezeichnungen für Windarten. p. 206-209. (Juli.)

Wegener, Kurt. Die Entstehung des Nebels. p. 209-211. (Juli.)

Benkendorff. Neuerungen im deutschen drahtlosen Wetterachrichtendienst. p. 235-237. (Aug.)

Brennecke, W. E. von Drygalskis Werk über das Eis der Antarktis und der subantarktischen Meere. p. 222-229. (Aug.)

Petersen, P. Die Eisverhältnisse an den deutschen Küsten während des Winters 1921/22. p. 244-251. (Sept.)

Seilkopf, Heinrich. Eismachrichtendienst. p. 252-255. (Sept.)

Wegener, Alfred, & Kuhlbrodt, Erich. Der Spiegeltheodolit für Pilot- und freie Registrirballonaufstiege auf See. p. 241-244. (Sept.)

Aviation. New York. v. 14. Jan. 8, 1923.

The Weather Bureau and aviation. Annual report details forecast work in aid of aviation and aerological investigations. p. 46-47.

Ciel et terre. Brux. 38 année. Nov.-Déc. 1922.

Gorczański, Ladislas. Sur la situation climatique de la Pologne et sur son degré de continentalisme. p. 375-388.

Jaumotte, J. Sur le déplacement du zéro dans l'électromètre de Mascart. p. 363-368.

L, E. Le tremblement de terre de Coquimbo (La Serena) et du Chili. p. 390-393.

Lagrange, E. Ole Roemer et le thermomètre Fahrenheit. p. 357-363.

Navarro, Manuel Maria S. Le barographe à mercure "Loyola." p. 371-375.